

## **Appendix E**

### **SAMPLE ENERGY AUDIT AGREEMENT**

**APPENDIX E  
(Attachment B)**

**STATE OF ALABAMA  
ENERGY PERFORMANCE CONTRACTING PROGRAM**

**MODEL ENERGY AUDIT AGREEMENT (DRAFT COPY)**

This Energy Audit Agreement is entered into on \_\_\_\_\_, 200\_, by and between \_\_\_\_\_ (the "**Institution**") and \_\_\_\_\_ (the "**Company**"). The Institution and the Company are referred to herein as the "**Parties**".

**Whereas**, the Institution has issued a Request For Proposals (RFP) to identify a Qualified Provider for a guaranteed energy savings contract;

**Whereas**, the Company submitted a response to the RFP and participated in a competitive evaluation procedure designed to identify a Qualified Provider;

**Whereas**, the Institution has selected the Company as a Qualified Provider;

**Whereas**, the Institution is responsible for the operation, management and maintenance of \_\_\_\_\_ (the "**Facility**");

**Whereas**, a comprehensive energy use and savings analysis (the "**Energy Audit**") must be performed at the Facility in order to determine the feasibility of entering into an Energy Performance Contracting Project to provide for the installation and implementation of energy conservation measures (ECMs) at the Facility;

**Whereas**, if the ECMs are demonstrated to be feasible, and if the amount of energy savings can be reasonably ascertained and guaranteed in an amount sufficient to cover all costs associated with an energy performance contracting project at the Facility, the Parties intend to negotiate an Energy Services Agreement (ESA) under which the Company shall design, procure, implement, provide training, maintain and monitor such energy conservation measures at the Facility;

**Therefore**, the Parties agree as follows:

**ARTICLE 1: SCOPE OF ENERGY AUDIT**

The Company will perform the Energy Audit and prepare a detailed engineering and economic report (the "Report") which specifically identifies the energy improvements and operational changes which are recommended to be installed or implemented at the Facility. The Report shall contain detailed projections of energy and cost savings to be obtained at the Facility as a result of the installation of the recommended energy conservation measures (ECMs). The savings calculations must utilize assumptions, projections and baselines which best represent the true value of future energy or operational savings for the Facility, including accurate marginal cost for each unit of savings at the time the audit is performed; documented material and labor costs actually avoided; adjustments to the baseline to reflect current conditions at the Facility, compared to the historic base period; calculations which account for the interactive effects of the recommended ECMs; etc. The Report shall clearly describe how utility tariffs were used to calculate savings for all ECMs. The Report shall describe the Company's plan for installing or implementing the measures in the Facility, including all anticipated costs associated with such installation and implementation. The primary purpose of the Report is to provide an engineering and economic basis for

negotiating an ESA between the Institution and the Company; however, the Institution shall be under no obligation to negotiate such a contract.

The Company shall perform the following tasks in performing the Energy Audit and preparing the Report:

A. Collect General Facility Information

The Company shall collect general Facility information such as: size, age, construction type, condition and general use of the Facility. The Company shall also collect and summarize Facility utility cost and consumption data for the most recent 36-month period. Company shall evaluate the impact on utility cost and consumption for any energy measures currently being installed or currently contemplated to be installed by the Institution in the Facility which will remain separate from the Energy Services Agreement throughout the duration of the ESA.

Institution shall furnish (or cause its energy suppliers to furnish) all available records and data concerning energy and water usage for the Facility for the most current 36 month period, if available, including: Utility records; occupancy information; descriptions of any changes in the structure of the Facility or its heating, cooling, lighting or other systems or energy requirements; descriptions of all major energy and water consuming or energy and water saving equipment used in the Facility; and, description of energy management procedures presently utilized. The Facility shall also furnish a record of any energy related improvements or modifications that have been installed during the past three years, or are currently being installed or are currently contemplated to be installed by the Institution in the Facility separate from the Energy Service Agreement throughout the duration of that agreement. The Institution shall also provide copies of drawings, equipment logs and maintenance work orders to the Company insofar as this information is readily available.

B. Inventory Existing Systems and Equipment

Company shall compile an inventory based on a physical inspection of the major electrical and mechanical systems at the Facility, including:

- Cooling systems and related equipment
- Heating and heat distribution systems
- Automatic temperature control systems and equipment
- Air distribution systems and equipment
- Outdoor ventilation systems and equipment
- Kitchen and associated dining room equipment, if applicable
- Exhaust systems and equipment
- Hot water systems
- Electric motors 5 HP and above, transmission and drive systems
- Interior and exterior lighting
- Laundry equipment, if applicable
- Water consumption end uses, such as restroom fixtures, water fountains, irrigation, etc.
- Other major energy using systems, if applicable

The inventory shall address the following considerations:

1. The loads, proper sizing, efficiencies or hours of operation for each system; (Where measurement costs, facility operating or climatic conditions necessitate, engineering estimates

may be used, but for large fluctuating loads with high potential savings, appropriate measurements are required unless waived by the Institution).

2. Current operating condition for each system;
3. Remaining useful life of each system;
4. Feasible replacement systems;
5. Hazardous materials and other environmental concerns

The Company shall use data loggers and conduct interviews with Facility operation and maintenance staff regarding the Facility's systems operation, occupancy patterns and problems with comfort levels or equipment reliability.

C. Establish Base Year Consumption and Reconcile with End Use Consumption Estimates

Company shall examine the most recent 36 months of utility bills and establish Base Year consumption for electricity, fossil fuels and water by averaging, or selecting the most representative contiguous 12 months. Company shall consult with Facility staff and account for any unusual or anomalous utility bills which may skew Base Year consumption from a reasonable representation.

Company shall estimate loading, usage and/or hours of operation for all major end uses representing more than 5% in aggregate of total Facility consumption including, but not limited to:

Water  
Lighting  
Heating  
Cooling  
HVAC motors (fans and pumps)  
Plug load  
Kitchen equipment  
Other equipment  
Miscellaneous

Where loading and/or usage are highly uncertain Company shall employ spot measurement and/or short term monitoring at its discretion, or at the request of the Institution. Reasonable applications of measurement typically include variable loads that are likely candidates for conservation measures, such as cooling equipment. The annual end use estimated consumption shall be reconciled with the annual Base Year consumption to within 5% for electricity (kWh), fossil fuels and water. The contribution to electric peak demand for each end use shall also be reconciled to within 5% of the annual Base Year peak. The "miscellaneous" category shall not be more than 5%. The purpose of this is to place reasonable limits on potential savings.

D. Develop List Of Potential Energy Conservation Measures (ECMs)

1. Identify and propose potential ECMs for installation or implementation at the facility, including water conservation measures;<sup>1</sup>

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<sup>1</sup>ECMs that the Institution is particularly interested in are specified in Attachment A, and should be addressed in the Report. The attached list is **not** intended to be exhaustive nor limit the Company's evaluation and development of a comprehensive list of potential ECMs.

2. Estimate the cost, savings and life expectancy of each proposed ECM;
3. Specify Facility operations and maintenance procedures which will be affected by the installation/implementation of the proposed ECMs;
4. Provide analysis methodology, supporting calculations and assumptions used to estimate savings. Manual calculations should disclose essential data, assumptions, formulas, etc. so that a reviewer could replicate the calculations based on the data provided;
5. For savings estimates using computer simulations, Company shall provide access to the program and all inputs and assumptions used, if requested by the Institution;
6. Provide a preliminary savings measurement and verification plan for each proposed ECM;
7. Provide a preliminary commissioning plan for the proposed ECMs;
8. Provide detailed calculations for any rate savings proposals;
9. Provide detailed supporting calculations for any proposed maintenance savings;
10. Estimate any environmental costs or benefits of the proposed ECMs (e.g. disposal costs, avoided emissions, water conservation, etc.).

**This list shall be compiled and submitted to the Institution within \_\_\_\_ days (*120 days is recommended*) of the execution of this Project Development Agreement.**

**E. Select Final Recommended ECMs**

Company shall, in consultation with the Institution, recommend specific ECMs from its preliminary compilation for installation and implementation at the Facility.

**F. Cost and Fee Estimates**

Company shall provide detailed estimates of costs associated with the installation, implementation and commissioning of each of the ECMs proposed in the Audit including breakouts for labor, materials, and equipment. In addition, project cost data must be provided in the format included in Attachment B: ESCO Cost Proposal and Cash Flow Analysis.

Company shall also provide estimates of monthly costs associated with sustaining the project performance including breakouts for maintenance fees, monitoring fees, and training fees.

**G. Savings Estimates**

The Institution has endeavored to provide the Company with sufficient general and specific guidance in this Article 1 to develop the savings estimates for the Report. In the event that questions arise as to the calculation of savings or whether certain items will be allowed as savings, the Company should seek written guidance from the Institution. The Institution reserves the right to reject items claimed as savings which are not in the Institution's utility budget line or which have been claimed contrary to the guidance given in this agreement or contrary to written guidance given to Company.

The Institution also reserves the right to reject Company calculations of savings when it determines that there is another more suitable or preferable means of determining or calculating such savings.

**For the purposes of completing the Cash Flow Analysis in Attachment B, the following items will be allowed as savings or in the development of savings:**

Escalation rates of \_\_\_\_\_ % for natural gas<sup>2</sup>  
Escalation rates of \_\_\_\_\_ % for electricity  
Escalation rates of \_\_\_\_\_ % for oil  
Escalation rates of \_\_\_\_\_ % for steam  
Escalation rates of \_\_\_\_\_ % for water  
Escalation rates of \_\_\_\_\_ % for other fuel type (specify)  
Escalation rates of \_\_\_\_\_ % for operation and maintenance cost savings  
Escalation rates of \_\_\_\_\_ % for material/commodity cost savings  
Escalation rates of \_\_\_\_\_ % for allowable labor savings

**The following items will not typically be credited as savings derived from a proposed ECM. The Company may seek exemptions from the Institution on a case-by-case basis. However, the final determination of allowable savings in each case considered shall reside with the Institution:**

Institution in-house labor cost  
Institution deferred maintenance cost  
Offset of future Institution capital cost

#### H. Report Format

The Report shall, at a minimum, include the following:

1. An executive summary which describes the facility, measures evaluated, analysis methodology, results and a summary table presenting the cost and savings estimates for each measure and for the project as a whole.
2. A discussion of measures not evaluated in detail and the explanation of why a detailed analysis was not performed.
3. A summary of all utility bills, Base Year consumption and how it was established, and end use reconciliation with respect to the Base Year including a discussion of any unusual characteristics and findings.
4. Detailed descriptions for each ECM including analysis method, supporting calculations (may be submitted in appendices), results, proposed equipment and implementation issues.
5. A discussion of the conclusions, observations and caveats regarding cost and savings estimates.
6. Thorough appendices which document the data relied upon to prepare the analysis and how that data was collected.

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<sup>2</sup> It should be noted that the base rate value for each fuel and water unit will not devalue in the event of any rate decrease. The Institution reserves the right to impose ceiling rates for fuel escalations.

The Report shall be completed within \_\_\_\_\_ days (*120 days is recommended*) of the date of execution of this Energy Audit Agreement. The cost for the completed Energy Audit and Report will be \_\_\_\_\_.

## **ARTICLE 2: ENERGY SERVICES AGREEMENT (ESA)**

The Parties intend to negotiate an ESA under which the Company shall design, install and implement energy conservation measures which the Parties have agreed to and provide certain training, maintenance and monitoring services. However, nothing in this Agreement should be construed as an obligation on any of the Parties to execute such an ESA. The terms and provisions of such an ESA shall be set forth in a separate agreement.

## **ARTICLE 3: PAYMENT**

Payment to Company for services performed in connection with the Energy Audit Agreement shall be made by Institution only in accordance with the provisions of Article 4 herein.

## **ARTICLE 4: TERMINATION**

### **A. By Contractor:**

Company may terminate this Agreement prior to the completion of the Energy Audit and Report or subsequent to the scheduled completion of the Energy Audit and Report if:

- (i) it determines that it cannot guarantee a minimum \_\_\_\_% savings in energy costs through the implementation of an energy performance contracting project at the Facility; or
- (ii) it determines that even though it can guarantee a \_\_\_\_% savings in energy costs, that amount would be insufficient to cover the costs associated with performing the Audit, installing energy conservation measures and related training, maintenance and monitoring services.

In the event Company terminates the Agreement pursuant to Section 4 A (i) or (ii) the Institution shall not be obligated to pay any amount to Company for services performed or expenses incurred by Company in performing the Energy Audit and Report required under this Agreement. Company shall provide the Facility with any Audit documents (preliminary notes, reports or analysis) which have been produced or prepared prior to the effective date of the termination. Company will return any documents or information that was provided by the Institution.

Termination under this section shall be effective upon Institution's receipt of written notification from the Company stating the reason for the termination and all documents which support termination pursuant to 4 A (i) or 4 A (ii) herein.

### **B. By Institution:**

Institution may terminate this Agreement:

- (i) If the Company fails to complete the Energy Audit and deliver the Report to the Institution by the date established in Article 1 H. above; or fails to obtain a written extension of that date from the Institution. Termination under this subsection B (i) shall be effective upon Company's receipt of written notification from the Institution that the deadline for

submission of the Energy Audit and Report has past. In this event, the Institution shall not be obligated to pay any amount to Company for services performed or expenses incurred by the Company in performing the Energy Audit and preparing the Report required under this Agreement. Company shall provide the Facility with any Audit documents (preliminary notes, reports or analysis) which have been produced or prepared prior to the effective date of the termination. Company will return any documents or information that was provided by the Institution.

- (ii) If, prior or subsequent to the completion of the Energy Audit or Report, the Company notifies the Institution in writing that it is unable to guarantee a sufficient level of savings pursuant to subsection 4 A (i) or (ii) above. Termination under this subsection B (ii) shall be effective upon Company's receipt of written notification of termination from the Institution. In this event, the Institution shall not be obligated to pay any amount to Company for services performed or expenses incurred by Company in performing the Energy Audit and preparation of the Report required under this Agreement. Company shall provide the Facility with any Audit documents (preliminary notes, reports or analysis) which have been produced or prepared prior to the effective date of the termination. Company will return any documents or information that was provided by the Institution.
- (iii) If, prior or subsequent to the completion of the Energy Audit or Report, the Institution notifies the Company in writing that it has elected to terminate this Agreement and not enter into an ESA, the Institution shall reimburse the Company for either the actual expenses incurred or percent of the Audit and Report completed as of the effective date of the termination, the amount being determined as fair and equitable by the Institution. Termination under this subsection B (iii) shall be effective upon Company's receipt of written notification from the Institution.

Company agrees to provide the Institution with any records of expenses incurred and any preliminary notes, reports or analyses which have been produced or prepared prior to the effective date of the termination. Such documentation shall be used by the Institution to determine the extent of work completed by Company prior to termination and shall become the property of the Institution.

If after completion and acceptance of the Energy Audit, the Institution does not enter into an ESA with the Company within \_\_\_\_\_ days (**60 days is recommended**) after written acceptance of the Energy Audit, the Institution agrees to reimburse the Company for the cost of the Energy Audit as detailed herein. Termination under this subsection B (iii) shall be effective upon Company's receipt of written notification from the Institution. The Energy Audit and Report will become the property of the Institution.

**It is clearly understood by both parties hereto that, if the Parties successfully negotiate and execute an Energy Services Agreement, no payment shall be due for the Energy Audit or Report under the terms of this Agreement. This Agreement shall automatically terminate upon the execution of an ESA by Company and the Institution for an energy performance contracting project at the Facility. It is further understood that provisions for payment for the Energy Audit shall be incorporated into the ESA.**

## **ARTICLE 5: STANDARD TERMS AND CONDITIONS**

### **SECTION 1. Agreement Term**



The Agreement term shall commence on the date the Agreement is executed by the Institution and end on \_\_\_\_\_, unless earlier terminated pursuant to the provisions of Article 4 hereof. Notwithstanding, Company shall adhere to the deadlines set forth in Article 1 regarding the completion and submittal of the list of ECMs and the Report.

## **SECTION 2. Materials, Equipment and Supplies**

The Company shall provide or cause to be provided all facilities, materials, equipment and supplies necessary to perform the Energy Audit and prepare the Report.

## **SECTION 3. Patent and Copyright Responsibility**

The Company agrees that any material or design specified by the Company or supplied by the Company pursuant to this Agreement shall not knowingly infringe any patent or copyright, and the Company shall be solely responsible for securing any necessary licenses required for patented or copyrighted material utilized by the Company in the performance of the Energy Audit and preparation of the Report.

## **SECTION 4. Institution Access to Records**

The Institution shall have the right, throughout the term of this Agreement and for a minimum of \_\_\_\_\_ years following completion of the Agreement, to inspect, audit and obtain copies of all books, records and supporting documents which Company is required to maintain according to the terms of this Agreement.

## **SECTION 5. Personnel**

All personnel necessary for the effective performance of the Energy Audit shall be employed by Company and its designated subcontractors, shall be qualified to perform the services required under this Agreement, and shall in all respects be subject to the rules and regulations of Company governing staff members and employees. Neither Company, its designated subcontractors, nor its personnel shall be considered to be agents or employees of the Institution.

## **SECTION 6. Compliance with Applicable Law**

In performance of its obligations pursuant to this Agreement, Company shall comply with all applicable provisions of federal, state and local law. All limits or standards set forth in this Agreement to be observed in the performance required under this Agreement are minimum requirements, and shall not affect the application of more restrictive federal, state or local standards applied to the performance of the Agreement.

## **SECTION 7. Waivers**

No right of either party hereto shall be deemed to have been waived by non-exercise thereof, or otherwise, unless such waiver is reduced to writing and executed by the party entitled to exercise such right.

## **SECTION 8. Assignment**

This Agreement may not be assigned by the Company without the prior written consent of the Institution.

## **SECTION 9. Federal Taxpayer Identification Number and Legal Status Disclosure**

Under penalty of perjury, the Company certifies that \_\_\_\_-\_\_\_\_ is the Company's correct Federal Taxpayer Identification Number and that the Company is doing business as a Corporation.

#### **SECTION 10. Governing Law**

This Agreement shall be governed by and construed only in accordance with the laws of the State of Alabama.

#### **SECTION 11. Agreement**

The following documents are incorporated in, and made a part of, this Agreement:

Attachment A - Facility's Recommended ECMs (Optional)

Attachment B – ESCO Cost Proposal and Project Cash Flow Analysis

*(Note: Institution should include all required policy provisions which may include the following:)*

Attachment I - Drug Free Workplace Provisions

Attachment II - Equal Employment Opportunity Clause

Attachment III - Certification of Capacity to Contract

Attachment IV- Americans With Disabilities Act

Attachment V- Certifications

#### **SECTION 12. Project Management**

All necessary and ordinary communications, submittals, approvals, requests and notices related to Project work shall be issued or received by:

**For Institution:**

**For Company:**

#### **SECTION 13. Amendments**

This Agreement and Attachments referenced in Section 11 herein constitute the entire Agreement between the Parties. No amendment hereof shall be effective until and unless reduced to writing and executed by the Parties.

#### **ARTICLE 6: EXECUTION**

**IN WITNESS WHEREOF**, the parties have executed this Agreement this \_\_\_\_day of \_\_\_\_\_, 200\_.

INSTITUTION \_\_\_\_\_

COMPANY \_\_\_\_\_

BY: \_\_\_\_\_

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

TITLE: \_\_\_\_\_

BY: \_\_\_\_\_

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

TITLE: \_\_\_\_\_

## **ATTACHMENT A**

### **FACILITIES Recommended Energy Conservation Measures**

Sample

## **ATTACHMENT B**

ESCOs Cost Proposal and Project Cash Flow

Sample

**ESCOs COST PROPOSAL  
ENERGY PERFORMANCE CONTRACT**

**INSTITUTION NAME:** \_\_\_\_\_ **ESCO NAME:** \_\_\_\_\_

**VALUE OF HARD COSTS<sup>1</sup>:** \$ \_\_\_\_\_

Category of Service Fees	Estimated Percentage (%) of Hard Costs	Dollar (\$) Value of Service Fees
Investment Grade Energy Audit		
Design Engineering Fees		
Construction Management		
System Commissioning		
First Year Training Fees		
Annual Service Fees including: Measurement and Verification Maintenance Performance Monitoring On-going Training Services		
Contingency Costs		
<b>Totals</b>		

<sup>1</sup>The total value of Hard Costs is defined in accordance with standard AIA definitions which include:

- Labor Costs
- Subcontractor Costs
- Costs of Materials and Equipment, Temporary Facilities and Related Items
- Miscellaneous Costs such as Permits, Bonds Taxes, Insurance, etc.

**NOTE:** Percentages should include all mark-ups, overhead, and profit. Figures stated as a range (e.g. 2%-5%) are not acceptable.

## ESCOs Cash Flow

Sample

